

## **MABE Publications and Presentations**

- Liu, Z., Herman, C., and Kim, J., “Heat Transfer and Bubble Detachment in Subcooled Pool Boiling from a Downward Facing Microheater Array in a Non-Uniform Electric Field”, Submitted to the Annals of the New York Academy of Sciences.
- Raj, R, Kim, J., “Thermocapillary Convection During Subcooled Boiling in Reduced Gravity Environments”, Submitted to the Annals of the New York Academy of Sciences.
- Arnold, W. A., Hartman, T. G. and McQuillen, J. “Chemical Characterization and Thermal Stressing Studies of Perfluorohexane Fluids for Space-Based Applications,” Journal Of Spacecraft And Rockets, pp 94-101, Vol. 44, No. 1, January–February 2007
- Henry\*, C.D., Kim, J., and McQuillen, J. “Dissolved Gas Effects on Thermocapillary Convection During Boiling in Reduced Gravity Environments”, Heat and Mass Transfer, Vol. 42, pp. 919-928, 2006.
- Henry, C.D., Kim, J., Chamberlain, B., and Hartmann, T.G., “Heater aspect ratio effects on pool boiling heat transfer under varying gravity conditions”, Experimental Thermal and Fluid Science, Vol. 29, No. 7, pp. 773-782, 2005.
- Myers, J.G., Yerramilli, V.K., Hussey, S.W., Yee, G.F., and Kim, J., “Time and space resolved wall temperature and heat flux measurements during nucleate boiling with constant heat flux boundary conditions”, International Journal of Heat and Mass Transfer, Vol. 48, No. 12, pp. 2429-2442, 2005.
- Henry, C.D., Kim, J., “Thermocapillary Effects on Low-G Pool Boiling From Microheater Arrays of Various Aspect Ratio”, Microgravity Science and Technology, XVI, pp. 170-175, 2005.
- Demiray, F. and Kim, J., “Microscale Heat Transfer Measurements During Pool Boiling of FC-72: Effect of Subcooling”, International Journal of Heat and Mass Transfer, Vol. 47 pp. 3257-3268, 2004.
- Kim, J., “Review of reduced gravity boiling heat transfer: US Research”, Invited review paper for Japan Society of Microgravity Application Journal, Vol. 20, No. 4, pp. 264-271, 2003.
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Henry, C.D. and Kim, J. “Heater size, subcooling, and gravity effects on pool boiling heat transfer”, International Journal of Heat and Fluid Flow, Vol. 25, No. 2, pp. 262-273, 2004.